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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,472	12/17/2001	William J. Kerns	2460	3563

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EXAMINER

ROSENBERGER, RICHARD A

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 06/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/023,472

Applicant(s)

KERNS ET AL.

Examiner

Richard A Rosenberger

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-28 and 40-44 is/are rejected.
- 7) ☐ Claim(s) 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01/12/2004
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

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1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 44 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44 is incomplete; it appears to have been intended to be a dependent claim, perhaps dependent from claim 1. However, claim 44 does not contain a reference to a preceding claim, and the wording of the claim, with language such as "further comprising", and a step "e" with no steps a-d, renders the claim incomplete and unclear.

Below claim 44 it is treated as if it were dependent from claim 1, which is how it is understood as having been intended.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5, 20-23, 25, 38 and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Jones (US 4,606,927).

As for claim 1, Jones shows a method of marking a product using a minute color coded identifier comprising layered particles. The particles, as shown in figure 1 of the reference, are comprised of colored layers (column 2, lines 32-40). The colored layers are reporter elements that have been entrained in a layer of the particle. The particles are "minute" (abstract, line 1) and the color sequence is a code, so the particle is a "microcoded particle" within the scope of the claim. The marking elements of Jones are attached to articles (column 1, lines 4-8; claim 1 of the patent).

Similarly for claim 20, Jones shows a "minute particle", i.e., a microparticle, with a reporter element entrained in a layer of the microparticle. As in instant claim 21, the microparticle of Jones had more than one layer (see figure 1). As in instant claims 22 and 23, as shown in figure 1 of the patent, the layer can be both surface layers (layers 12 or 24 if figure 1 of the patent, see column 2, lines 32-36) which includes the surface layers as layers that comprise coded colors, and thus comprise reporter elements. As in instant claim 25, separate reporter elements can reside on separate layers.

In regard to instant claims 38, the reporter element of Jones et al is made of some physical material, and is detectable. Thus it is "of a detectable mass".

As in instant claims 41, the reference teaches forming a multilayer microparticle (figure 1) and entraining a reporter element in one of the layers of microparticle.

6. Claims 24, 26-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (4,606,927) and Schwartz et al (US 4,767,205).

Jones teaches associating a unique marks on an object. The unique mark includes coded microparticles dispersed in an adhesive medium; the code is in form of reporter elements entrained in layers of the microparticle.

Schwartz et al, like Jones, teaches the use of coded microparticles to mark an item, and discloses that the particles can be fluorescent (column 5, lines 43-44), and the fluorescence be used as a reporter element, see column 7, lines 5-11; note the microbeads themselves fluoresce and the color of the fluorescence (in that example, red and green) is part of the code (column 7, lines 9-11). It would have been obvious to use such known fluorescence marking materials in the layered microparticles of Jones because, as shown by Schwartz et al, it is a known variant to color alone for such security features.

The purpose of the use of coded microparticles of the sort taught by Jones and Schwartz et al is to provide distinguishable coded particles to identify and

authenticate the articles to which they have been applied. The references disclose that the distinguishing features can be color or fluorescent emission. The use of particular fluorescent materials, such as infrared fluorescent materials, or similar emissive materials, such as various phosphorescent materials, would have been obvious. The use of any type of marking material or feature which would provide distinguishing features as in general taught by the references to accomplish this identification would have been obvious.

7. Claims 1-4, 6-19, and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones (4,606,927), Schwartz et al (US 4,767,205), Stenzel et al (US 4,146,792), and Molee et al (US 5,380,047).

Jones teaches associating a unique marks on an object. The unique mark includes coded microparticles dispersed in an adhesive medium; the code is in form of reporter elements entrained in layers of the microparticle. The use of fluorescent markers in such beads is obvious; see above.

The references appear to contemplate visual, albeit microscopic, reading and recognition of the particles and the codes associated therewith. It is, however, known that with the use of fluorescent markers for security purposes that the actual spectra of the emission can be used as a more precise determination of the authenticity. Stenzel et al (US 4,146,792) teaches this in general, using one of more fluorescent materials to mark a document and teaching that the spectrum can be

used as an identifier; see column 1, line 66 through column 2, line 2. It would have been obvious to use the spectra of the fluorescence, rather than just the visual color of the fluorescence, of applied microparticles because this is a known manner of using fluorescence to authenticate documents.

The code can be associated with the owner of the article (Jones, column 3, lines 45-53). It is clear that the chosen code must be associated with an interpretation as to its meaning, and to be useful the interpretation must be recorded and available to those who wish to verify the ownership or the like that is encoded by the code. It is known to place such unique coding information in computer databases and make it remotely available, as shown by Molee et al. The use of the internet rather than the telephone as disclosed by Molee et al would have been obvious at the time the invention was made because the internet is a well-known system of remote information retrieval and allows rapid access at all times from anywhere in the world where the internet is available. Molee et al also discloses associating a certificate of authenticity with the object. Molee et al shows including a visual indicia such as a number as a part of the system, the visual indicia being associated with a tamper-proof mark; the use of the microparticles of Jones in conjunction with the indicia of Molee et al would have been obvious because it would add security in that the microparticles as taught by Jones are, as disclosed therein, a known way of identifying articles in a secure manner.

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8. The art does not appear to teach or suggest embossing a bar code onto the surface of a surface layer of a microparticle which has a reporter element entrained in a layer thereof. Thus claim 39 contains allowable subject matter and would be allowable were it rewritten in independent form including all of the limitations of its parent claim.


9. The remarks filed 18 March 2004 have been considered. The remarks argue that the Jones reference does not show "entraining a reporter element in a layer of a microcoded particle." This, however, is exactly what it does show. There is no limitations in claims 5 or 20, for example, to distinguish the claimed reporter element of those claims from the coloring of the layers of Jones.

10. Papers related to this application may be submitted to Group 2800 by facsimile transmission. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (15 November 1989). The fax number is (703) 872-9306

Any inquiry concerning this communication or earlier communications from the examiner should be directed to R. A. Rosenberger whose telephone number is (571) 272-2428.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

R. A. Rosenberger
27 May 2004



Richard A. Rosenberger
Primary Examiner